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RESPONSE UNDER 37 C.F.R. § 1.116
EXPEDITED PROCEDURE
GROUP 2141
PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q65313

Peter JAENECKE, et al.

Appln. No.: 09/911,519

Group Art Unit: 2141

Confirmation No.: 4229

Examiner: Nicholas R. Taylor

Filed: July 25, 2001

For: METHOD OF TRANSFERRING USER DATA PACKETS

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated March 16, 2005, Applicants submit the following remarks.

Claims 1-21 are all the claims pending in the application.

1. Claims 1-13 and 15-16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Shiino (USP 6,452,936) and Bush ("S-CDMA: Two-way data over cable.")

A. In the Amendment dated February 17, 2005, Applicants argued that Shiino fails to teach or suggest repeatedly transmitting a reference data packet coded with a pilot code for the duration of the connection between terminal and mainframe. The Examiner argued that

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Shiino teaches all possible packet formats sent throughout the connection as containing a pilot code.

Shiino is used to estimate channel characteristics with necessary accuracy for communication with a mobile station and adjust channel overhead accordingly. As shown in Fig. 3 of Shiino, different frame configurations are used for different channel conditions: frame configuration III is used in communication with a mobile station moving at high speed; frame configuration II is used when the mobile station is moving at medium speed; and frame configuration I is used when the mobile station is moving slowly. In each frame configuration, a packet comprises pilot data P, and payload data D. The first packet in each data frame also includes configuration information R (Shiino, col. 3, lines 4-8).

The Examiner is correct that, in Shiino, all possible packet formats sent throughout the connection contain a pilot code. However, the pilot code is not sent as a packet, but as reference data for a packet. In Shiino, the term packet means a transmission frame comprising one header followed by payload data (Shiino, col. 1, lines 27-29). Thus, the pilot data in the header is a part of a packet, instead of a reference data packet. In other words, in the claimed invention, reference data packet and user data packets are coded and transmitted separately, but in Shiino, pilot data and payload data are transmitted in one packet.

In addition, in the claimed invention, the reference data packet coded with a pilot data is transmitted for the duration of the connection between terminal and mainframe. However, in Shiino, the pilot code is used as header of a packet, not to code reference data packet.

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B. The Examiner has argued that, during configuration I of Shiino, no additional pilot code is combined. However, as shown in Fig. 3 of Shiino, the header of the first packet includes pilot data P and configuration information R; and the header of the second packet includes only pilot data P. Thus, the header for the beginning packet is different from the header for the packets thereafter.

The Examiner has argued that the claim language does not specify that the claimed invention is limited to only one reference data packet. However, a skilled artisan would appreciate that, when a reference data packet is repeatedly transmitted for the duration of the connection, the transmitted reference data packet must be the same reference data packet for the duration of the connection. However, in Shiino, no reference data packet is repeatedly transmitted for the duration of the connection.

C. Another difference between Shiino and the claimed invention is that the claimed invention sends packet coded with a pilot code, but Shiino sends a packet containing a pilot code. Shiino includes a pilot code in all packets, but it is carried as data and is not used to code a reference data packet.

Thus, Shiino fails to teach or suggest repeatedly transmission of a reference data packet coded with a pilot code for the duration of the connection between terminal and mainframe.

Bush discusses sending upstream data in cable plants traditionally designed for one-way broadcast services, and does not supply any deficiency of Shiino.

Accordingly, Applicants respectfully resubmit that claims 1-13 and 15-16 are patentable over the combination of Shiino and Bush.

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2. Claim 14 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Shiino and Bush, and further in view of Nordbotten ("LMDS Systems and their Application").

Nordbotten discusses application of LMDS systems, and does not supply any deficiency of Shiino and Bush. Accordingly, Applicants respectfully submit that claim 14 is patentable over the combination of Shiino, Bush and Nordbotten.

3. Claims 17-20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Shiino, Bush, and further in view of Honkasalo (USP 6,101,176).

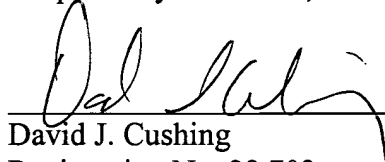
Honksalo discloses an apparatus for the overlaid operation of a small-scale or indoor wireless communication system and a large-scale or outdoor wireless communication system. Honkasalo does not supply any deficiency of Shiino and Bush. Accordingly, Applicants respectfully submit that claims 17-20 are patentable over the combination of Shiino, Bush, and Honkasalo.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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